



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PA1651WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/FR2003/003656	International filing date (day/month/year) 10 décembre 2003 (10.12.2003)	Priority date (day/month/year) 17 décembre 2002 (17.12.2002)
International Patent Classification (IPC) or national classification and IPC G01N 21/64		
Applicant COMMISSARIAT A L'ENERGIE ATOMIQUE		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
- ☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 25 juin 2004 (25.06.2004)	Date of completion of this report 11 January 2005 (11.01.2005)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FR2003/003656

I. Basis of the report

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed
- ☒ the description:
 pages _____ 1-12 _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages _____ 1-20 _____, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the drawings:
 pages _____ 1/3-3/3 _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	2-5, 10-14, 16, 20	YES
	Claims	1, 6-9, 15, 17-19	NO
Inventive step (IS)	Claims		YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims		NO

2. Citations and explanations

1. Reference is made to the following documents:

D1: DE 102 00 865 A1

D2: US 6,242,114 B1

D3: WO 02/48691 A1

2. Independent claim 1

D1 describes a standard microcomponent for calibrating and standardising fluorescence measuring equipment (see paragraph [0030]) including a non-fluorescent substrate (see paragraph [033]) on which a thin layer of polymer comprising fluorescent components is deposited (see paragraphs [0038] to [0039]); said microcomponent comprises multiple areas having different levels of fluorescence; said levels are adjusted by varying the exposure of the layer (see paragraphs [0046] to [0047]; claim 8).

According to the characterising part of claim 1 "first and second levels of fluorescence are defined by an unexposed portion and at least one exposed area, respectively, of said thin layer, the second level of fluorescence being lower than the first

level of fluorescence".

These features are also implied in D1: the term "adjusting the level of fluorescence by exposure" includes, as a lower limit, non-exposure. The fact that the level of fluorescence of an exposed area is lower than the level of fluorescence of an unexposed portion is merely the unavoidable result of exposure, regardless of the physical explanation ("bleaching" in the present application, or reticulation in D1).

To conclude, no structural or functional difference exists between the microcomponent described in D1 and the microcomponent according to claim 1.

Consequently, the subject matter of claim 1 does not comply with the criterion of novelty as defined by PCT Article 33(2).

3. **Dependent claims**

Dependent claims 2 to 20 contain no feature which, when combined with the features of any one of the claims to which they refer, defines subject matter that complies with the PCT requirements of novelty and/or inventive step, for the following reasons:

Claims 2 and 3: D1 (see figure 1 and paragraphs [0046] and [0047]): three areas having layers of differing thickness separated by areas without a layer (openings), thereby providing a total of four different levels of fluorescence; as an alternative, D1 proposes to define different levels of fluorescence by exposing a layer of uniform

thickness.

Claims 4 and 5: D1 (see paragraph [0057]): the level of fluorescence of a non-fluorescent substrate, referred to as the third level, is obviously at least 10 to 100 times less than any first level of fluorescence defined by a fluorescent layer.

Claims 6 to 9: D1 (see paragraphs [0038], [0047] and [0057]).

Claims 10 to 13 and 20: D1 in combination with D2 (see column 4, lines 45 to 65).

Claim 14: D1 in combination with D2 and D3 (see page 6, lines 15 to 27).

Claim 15: D1 (see paragraph [0047]).

Claim 16: D1 (see figure 1).

Claim 17: D1 (see paragraph [0060]).

Claims 18 and 19: D1 (see paragraphs [0033], [0038], [0046] and [0047]).
